



50 years of Evolution of Science of Hydrology: From Science to Application and Way Forward

Dedicated to the 50th anniversary of IHP and 60 years of the Water Programme at UNESCO since the International Hydrological Decade (1965-1975)

AGENDA

8:30-9:00	Welcoming Coffee
9:00-9:30	<p>Opening Session</p> <p>Moderator: Mr Abou Amani, Director of the Division of Water Sciences, UNESCO</p> <p>Opening Remarks: (20 minutes)</p> <ul style="list-style-type: none"> Ms Lidia Arthur Brito, Assistant Director-General for Natural Sciences, UNESCO Mr Helmut Habersack, Chairperson, IHP Intergovernmental Council <p>Opening Presentation: Mr Anil Mishra, Chief of Section, UNESCO (10 minutes)</p> <p>Rapporteur: Ms Annelies Mertens (UNESCO-IHP)</p>
9:30-11:00	<p>Session 1:</p> <p>Evolution of the science of hydrology over the last 50 years and IHP's role</p> <p>Moderator: Mr Andras Szollosi Nagy (UNESCO Chair, Water Conflict Management)</p> <p>Keynote speakers: (30 minutes)</p> <ul style="list-style-type: none"> Mr Taikan Oki, President, JSHWR: (10 minutes) <i>Global Hydrology: From Forgotten Science to Data-oriented Earth System Science</i> Ms Berit Arheimer, President, IAHS: (10 minutes) <i>From Newtonian to Darwinian hydrological understanding in the Anthropocene</i> Mr Venkataraman Lakshmi, President, AGU: (10 minutes) <i>Observing hydrological extremes from space</i> <p>Panel members: (40 minutes) Mr Patrick Ray (University of Cincinnati, USA), Mr Cedric David (NASA), Mr David Kreamer (IAH)</p> <p>Q&A with Audience (20 minutes)</p> <p>Rapporteurs: Mr Henny Van Lanen (WUR, Netherlands), Mr Koen Verbist (UNESCO-IHP)</p>

11:00-11:30	Coffee Break
11:30-13:30	<div>Session 2:</div> <div>IHP role in operationalizing the science of hydrology in addressing water resources challenges</div> <div>A</div> <div>Moderator: Mr Graham Jewitt (IHE Delft Institute for Water Education)</div> <div>Keynote speakers: (15 minutes)</div> <ul style="list-style-type: none"> Mr John Pomeroy, UNESCO Chair, Mountain Water Sustainability: (7,5 minutes) <i>Science Supporting Operational Hydrology – Observations and Predictions from Local to Ungauged to Continental Scale</i> Mr Soroosh Sorooshian, Professor, University of California (Virtual): (7,5 minutes) <i>Advances in high-resolution precipitation estimations using machine learning and satellite observations: Challenges in operationalizing them.</i> <div>Panel members: (30 minutes)</div> <div>H.E Ms Blanca Jimenez-Cisneros Ambassador of Mexico to France, Mr Gabriel Mancilla (CAZALAC) (Virtual), Mr Callist Tindimugaya (Ministry of Water and Environment, Uganda), Mr Wouter Buytaert (Imperial College London, UK) (Virtual), Mr Stefan Uhlenbrook (Director, WMO)</div> <div>Q&A with Audience (15 minutes)</div> <div>Rapporteurs: Mr Will Logan (ICIWaRM), Ms Ruth Nguma (UNESCO-IHP)</div> <div>B</div> <div>Moderator: Mr Henny Van Lanen (WUR, Netherlands)</div> <div>Keynote speakers: (15 minutes)</div> <ul style="list-style-type: none"> Ms Alice Aureli, IAH: (7,5 minutes) <i>UNESCO IHP- Groundwater: making the invisible visible</i> Mr Toshio Koike, Director, ICHARM: (7,5 minutes) <i>Bridging Science and Society: IHP's Key Role to Well-Informed Climate Change Adaptation</i> <div>Panel members: (30 minutes)</div> <div>Mr Jan Daňhelka (Chair Hydrological Assembly, WMO), Mr Xin Li (CAS, China), Ms Maria Donoso (FIU, USA), Mr Maciej Zalewski (ERCE, Poland)</div> <div>Q&A with Audience: (15 minutes)</div> <div>Rapporteurs: Mr Justin Sheffield (University of Southampton, UK) Ms Elfithri Rahmah (UNESCO-IHP)</div>
13:30-14:30	Lunch Break

<div>14:30-16:30</div>	<div> <div> <div>Session 3:</div> <div>The emerging challenges and opportunity and prospects of the Science of Hydrology and IHP's role</div> <div>A</div> </div> <div> <div>Moderator:</div> <div>Mr Justin Sheffield (University of Southampton, UK)</div> </div> <div> <div>Keynote speakers:</div> <div>(15 minutes)</div> <div> <div> <div>• Mr Fernando Nardi, Academy Chair, IAHS:</div> <div>(7,5 minutes)</div> <div>Advancing hydrological sciences with and for citizens</div> </div> <div> <div>• Mr Ad Jeuken, Expert Advisor, Deltares:</div> <div>(7,5 minutes)</div> <div>How hydrological science can support risk informed decision making for climate adaptation</div> </div> </div> <div> <div>Panel members:</div> <div>(30 minutes)</div> <div>Ms Afua Owusu (Virtual) (IWMI), Mr Cristophe Cudennec (Vice-President, IAHS), Mr Sebastian Krogh Navarro (Universidad de Concepción, Chile), Ms Awa Niang-Fall (Université Cheikh Anta Diop de Dakar, Senegal)</div> </div> <div> <div>Q&A with Audience</div> <div>(15 minutes)</div> </div> <div> <div>Rapporteurs:</div> <div>Mr Cedric David (NASA), Ms Siying Tan (UNESCO-IHP)</div> </div> <div> <div>B</div> </div> <div> <div>Moderator:</div> <div>Mr Jean-Marie Kileshye Onema (Secretary General, IAHS)</div> </div> <div> <div>Keynote speakers:</div> <div>(15 minutes)</div> <div> <div> <div>• Mr Eduardo Mario Mendiondo, Professor, USP, Brazil:</div> <div>(7,5 minutes)</div> <div>Co-alignment of legacies: the UNESCO 's legacy and the IAHS 's legacy including transboundary issues and co-creation of water knowledge</div> </div> <div> <div>• Ms Ann Van Griensven, UNESCO Chair, Open Water Science and Education:</div> <div>(7,5 minutes)</div> <div>Making the invisible water crisis visible: from ungauged to engaged basins</div> </div> </div> <div> <div>Panel members:</div> <div>(30 minutes)</div> <div>Mr Dhiraj Pradhananga (Tribhuvan University, Nepal), Mr Albert Nkwasa (IIASA), Mr Eddy Moors (Rector, IHE), Mr Piet Kebuang Kenabatho (University of Botswana)</div> </div> <div> <div>Q&A with Audience:</div> <div>(15 minutes)</div> </div> <div> <div>Rapporteurs:</div> <div>Mr Wouter Buytaert (Imperial College London, UK), Mr Patrice Moix (UNESCO-IHP)</div> </div> </div> </div></div>
<div>16:30-17:00</div>	<div>Coffee Break</div>

<p>17:00-18:30</p>	<h2 style="text-align: center;">Plenary Session</h2> <p>Moderator: Mr Anil Mishra, Chief of Section, UNESCO-IHP</p> <p>Key messages and way forward: (50 minutes)</p> <ul style="list-style-type: none"> • Moderator and rapporteurs - session 1 (10 minutes) • Moderator and rapporteurs - session 2.a (10 minutes) • Moderator and rapporteurs - session 2.b (10 minutes) • Moderator and rapporteurs - session 3.a (10 minutes) • Moderator and rapporteurs - session 3.b (10 minutes) <p>Closing remarks: (10 minutes)</p> <ul style="list-style-type: none"> • Mr Abou Amani, Director of the Division of Water Sciences, UNESCO <p><i>Rapporteur: Ms Rita Marteleira, (UNESCO-IHP)</i></p>
<p>19:00</p>	<h2 style="text-align: center;">Reception</h2>

